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**PROJECT REPORT
COMMITTEE ON FOOD RESEARCH**

QUARTERMASTER FOOD AND CONTAINER INSTITUTE
FOR THE ARMED FORCES
CHICAGO ILLINOIS

RESEARCH AND DEVELOPMENT BRANCH
MILITARY PLANNING DIVISION
OFFICE OF THE
QUARTERMASTER GENERAL

COOPERATING INSTITUTION University of California		LOCALITY Berkeley, California	
DIVISION Medical School		DEPARTMENT Division of Physiology	
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REPORT NO. 5		FILE NO. P-1012 W11-1009-1-70208	
FOR PERIOD COVERING Oct. 1, 1947 - Jan. 1948		INITIATION DATE July 1946	
TITLE: [<input checked="" type="checkbox"/>] PROGRESS REPORT [<input type="checkbox"/>] PHASE REPORT [<input type="checkbox"/>] ANNUAL REPORT [<input type="checkbox"/>] TERMINATION REPORT "Effect of Diet and Environment on Pancreatic Secretion"			

SUMMARY

In earlier reports it was shown that the pancreas of chicks fed raw soy bean diets are larger than those of chicks fed diets containing cooked soy beans or stock diets. These results were obtained on birds fed the soy bean diets for 2 or 3 weeks. The time of onset of the changes in the pancreas have now been determined. Within 5 days a raw soy bean diet will induce an increase in the size of the pancreas of young chicks. A summary of the data follows:

Age of chicks at sacrifice	Days on raw soy bean diets	Number of chicks	Chick weight (average)	Pancreas weight (average)	Pancreas per cent chick weight
days			gm.	gm.	gm.
13*	1	5	68	0.44	0.65
14*	2	4	69	0.50	0.73
15*	3	5	70	0.56	0.80
16*	4	5	72	0.72	1.00
16**	0	10	101	0.66	0.66

* Fed stock diet for first 12 days after hatching, then placed on raw soy bean diet containing 25 per cent protein.

** Fed stock diet only.

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